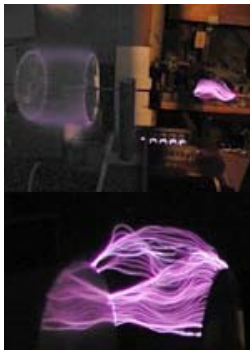




**The Turn Of The Century
Electrotherapy Museum
Forgotten Tesla Technologies
2006**

<http://www.electrotherapymuseum.com>

Updates from 2006:



**Prototype Strong-Ovington Apparatus:
Dr. Strong's Condenser Terminal's!**

**Prototype Strong-Ovington Apparatus
Testing Phase I...**



**Christmas Coils for Brian and Frank (and Jeff)
Secondary Coil for Strong-Ovington Apparatus**



Curious Zig-Zag Discharges...



**Adjustable Frequency Tesla Coil Power Supply
Testing a 16" Pancake Coil Gallery!**

Movie 1 - Flat Spiral Coil - 16" Diameter

Movie 2 - Flat Spiral Conical Coil - 14" Diameter



**Flat Spiral To Conical Coil - Testing a
Modified Form of Kinraide "Jackson Coil"**

**A Selection Of Early Tesla Coils and
Cross Sections Of Pancake Coils**

Frank and his amazing Tesla Lamps!



Complete Half Size Tesla Induction Coil:
An interesting look at a classic forgotten Tesla Coil design.



22 October 2006 Weekend Projects:
Floor Model Pancake Tesla Coil,
1890s Tesla High Frequency Induction Coil,
Prototype Flaming Arc Twin Pancake Coil



Half-Size Tesla Induction Coil
A bipolar Pancake Coil with the primary coil on the inside. Each half of the primary has 25 turns, each secondary coil has 120 turns. Discharge is over 4".



Happy Birthday Nikola Tesla!
Long Island New York Photos!



Tesla "Pancake Coils":
Redefining Tesla Technologies

Arcing Pancakes - Testing Phase I
Machined from scratch in two days...a bipolar Tesla /



Kinraide Coil modified for low voltage high current outputs.



**Kinraide Reproduction Electrode:
Point / Limitless Plane Electrode**

In particular, note the following discharges:

TCFSparks1: Point is even with the surface of the plane

TCFSparks2: Point is retracted inside of plane

TCFSparks3: Point is protruding from plane



Huge Quenched 5-Series Spark Gap



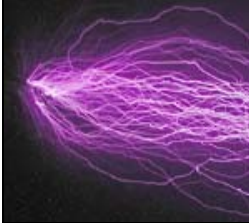
Campbell D Restoration: Cast Knobs



Electrotherapy Museum Name Plates



Gigantic 16-Series Quenched Spark Gap



August 2006 Sparks

Rita is away so I made some noise and photographed the two Tesla Coils below in action at night...



8" Twin Pancake Tesla Coil

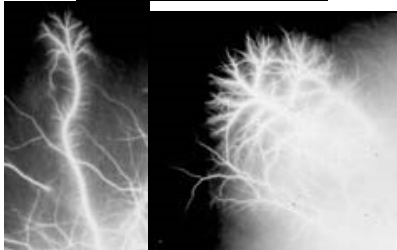
Operated with a 10kV 23mA Neon/OBIT Transformer, .01 Mica Transmitting Capacitor, and 4-Series Reproduction Osborn Spark Gap (originally made by H. G. Fischer for Thompson Plaster Cabinets)

**7" Twin Pancake Tesla Coil with 2900 BPS
Rotary Break - 50-100W, 9" maximum
discharges!**



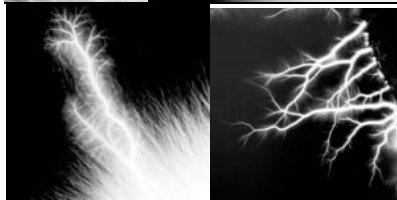
Movie of Twin Pancake Tesla Coil

**100 Watt Twin Pancake Tesla Coil
with Rotary Spark Gap - 8" Discharges!**



Pancake Tesla Coil Operated with Carpentier Style Interrupter: Electric Autographs

This coil was producing snake-like strobing negative discharges 4-5" long, interposed with very distinct branching positive discharges 3" long. Current consumption: 100 watts at 110VAC.



**4th of July Fireworks Kinraide Style:
Electric Discharges: Snakelike Streamers &
Branching Discharges**

1. On 8x10 Paper

2. On X-Ray Film

Lichtenberg Figures in Crookes vacuum

These figures are unfortunately unclear due to the near impossible circumstances of trying to photograph them - they were created using a burned out Edison bulb with a straight filament. The filament heavily bombarded was spinning around the tube, and when it hit the glass formed rapid moving Lichtenberg Figures.



1. Images

2. Movie



Gaiffe Gallot Mercury Interrupter

Frank found a real gem here! He won't tell me when he gets it up and running, because he knows I'll fly there and will never leave!!

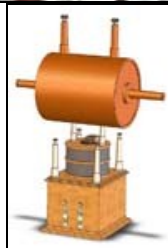


**Figure 1: Tesla Oscillator
For Experimental Use**



Tesla Patent 583,593: Electric Circuit Controller that charges the condensers in parallel and discharges them in series

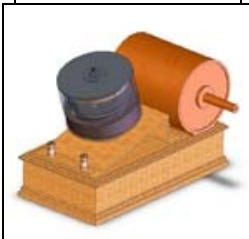


Figures 4 & 7: Misc. Tesla Oscillators with mechanical breaks



Tesla Oscillator for Ignition Purposes: Patent 609,250

A Tesla Coil for igniting gas engines - a "Tesla" ignition coil.



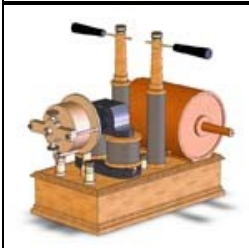
Tesla Oscillator with Mercury Interrupter: Patent 609,248

This patent utilizes a liquid-to-liquid "make", with an insulating disk used to separate the liquids for the "break" duration.



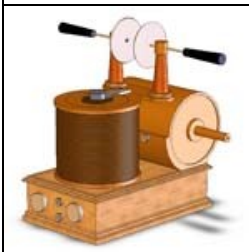
Tesla Oscillator with Mercury Interrupter: Patent 609,247

This patent utilizes liquid-to-solid interruptions of a centrifugal ribbon of mercury to make and break contact with a fan blade.



Tesla Oscillator with Mercury Interrupter: Patent 609,251

It's not perfect, but these still took forever to draw!



Tesla Oscillator For Producing Ozone

Here are some 3D renderings I made of a famous Tesla Coil.

18" Flat Spiral Coils

A weekend outdoors: making coils and entertaining the cat.



Powerstats!

We've recently acquired 3 large 3-phase variable transformers. ("Variacs" type transformers, manufactured by Powerstat)

Divided they form 3 single phase autotransformers. We need only 1 unit, the other two are FOR SALE!



Reproduction Thompson Plaster Spark Gaps

These gaps are unique in that they are stationary, yet adjustable through the use of a sliding arm that short circuits the number of gaps not wanted in the circuit. They are ideal for voltages from 3,500 - 25,000V or more.



Virtual Reproduction Thompson Plaster Spark Gap



High Energy Research Acquisitions...

1000 pounds of new components...including a massive 570 pound 25kV capacitor (.046 mfd - .460 mfd); an electro-magnet with a 7.5" diameter x 24" tall core; some rather unique d'Arsonval Coils...



Testing an 18" Pancake Coil

9600V 120mA Transformer; .046 mfd Condenser; 5-series 1/2" Tungsten Spark Gap; 18" OD 4" ID Pancake Coil: One turn per layer, 21 AWG wire.

Movie: Testing Phase I

Movie: Testing Phase II



Violet Ray Coil Yielding 3-4" Sparks?!

With a normal Master Violet Ray Coil (operating under oil) I was able to get 3-4" sparks using my special adjustable condenser circuit.



3" Pancake Coil Testing:
Produces 2" - 4" Flaming Discharges.

Film of discharges (2.5 MB)

Film of "Dancing, Bursting Effluves" and Flaming Discharges